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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/895,877	07/02/2001	Toshiaki Tanaka	016887/1044	5377

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EXAMINER

SINGH, SATWANT K

ART UNIT PAPER NUMBER

2626

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/895,877	Applicant(s) TANAKA, TOSHIAKI	
	Examiner Satwant K. Singh	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 13, and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett et al. (US 5,935,262) in view of Murata (US 5,914,789).

3. Regarding Claim 1, Barrett et al teach an image forming apparatus for printing out data on the basis of given information, comprising:

a) a memory for storing information for use in the maintenance of said image forming apparatus (DRAM 175);

b) a capacity determination unit for, when a use capacity of said memory has reached a predetermined value (triggering condition detected), notifying said memory of information representing that the use capacity has reached the predetermined value and instructing said memory to output the stored information (Fig. 11) (another triggering condition that can be selected is a log memory full condition) (col. 17, lines 28-38);

Barrett et al fail to teach a compressing unit for compressing the output information from said memory and outputting as coded information.

Murata teaches a compressing unit for compressing the output information from said memory and outputting as coded information (Fig. 1, CODEC 57) (CODEC 57

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performs the MMR coding on the binarized image data outputted to the SCU 55 so as to generate encoded facsimile image data) (col. 11, lines 17-21).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Barrett with the teaching of Murata to compress and encode the log information to prevent unauthorized access to the maintenance information.

4. Claim 13 is rejected for the same reason as claim 1.

5. Claims 23, 25 and 26 are rejected for the same reason as claim 1.

6. Regarding Claim 24, Barrett et al teach a medium, wherein the information contains information concerning an operation log of said image forming apparatus, information concerning the setting of said image forming apparatus, and information concerning a paper jamming occurrence portion (Printer status information which could be transmitted from printer 102 to NEB 101 includes: transient state; online, printing; offline, not printing; engine test detected; maintenance program running; in sleep mode; paper out; printer open; paper jam)(col. 26, lines 11-15).

7. Claims 2, 3, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett et al. and Murata as applied to claim 1 above, and further in view of Morohashi et al. (US 6,043,899).

8. Regarding Claim 2, Barrett et al and Murata fail to teach an apparatus, wherein said compressing unit converts the output information from said memory into coded information containing a character and number or bar code type digital information, and outputs the converted information.

Morohashi et al teach an apparatus, wherein said compressing unit converts the output information from said memory into coded information containing a character and number or bar code type digital information (code pattern image encode unit 45), and outputs the converted information (dot data memory 28) (code pattern image recording apparatus converts input information into a code pattern image....input information is not limited to audio information, but may be video information, digital code data including text data) (col. 5, lines 34-45).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Barrett and Murata with the teaching of Morohashi to encode the output information to prevent unauthorized access to the maintenance information.

9. Regarding Claim 3, Barrett et al and Murata fail to teach an apparatus, wherein the coded information containing a character and number is expressed by a base- $10+n$ (n is an integer of not less than 1) number.

Morohashi et al teach an apparatus, wherein the coded information containing a character and number is expressed by a base- $10+n$ (n is an integer of not less than 1) number (code pattern image recording apparatus converts input information into a code pattern image) (Fig. 3).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Barrett and Murata with the teaching of Morohashi to encode the output information to prevent unauthorized access to the maintenance information.

10. Claim 14 is rejected for the same reason as claim 2.
11. Claim 15 is rejected for the same reason as claim 3.
12. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett et al. and Murata as applied to claim 1 above, and further in view of Murano et al et al (US 6,043,899).
13. Regarding Claim 4, Barrett et al and Murata teach a communication system for the maintenance of an image forming apparatus, which comprises said image forming apparatus having a printing unit for printing out data on the basis of given information, and a service provider's apparatus for receiving information for use in maintenance of said image forming apparatus, wherein said image forming apparatus comprises: a memory for storing information for use in the maintenance of said image forming apparatus; a capacity determination unit for, when a use capacity of said memory has reached a predetermined value, notifying said memory of information representing that the use capacity has reached the predetermined value and instructing said memory to output the stored; and a compressing unit for compressing the output information from said memory and outputting as coded information.

Barrett et al and Murata fail to teach a communication system, which comprises a service provider's apparatus comprises information storage means for sequentially receiving and storing the coded information.

Murano et al teach a communication system, which comprises a service provider's apparatus comprises information storage means for sequentially receiving

and storing the coded information (Fig. 7A) (central fax service center 1 receives the support service application by fax communication) (col. 12, lines 25-37).

14. Claims 5-8 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett et al., Murata, and Murano as applied to claim 4 above, and further in view of Morohashi et al. (US 6,043,899).

15. Regarding Claim 5, Barrett et al, Murata, and Murano fail to teach a system, wherein said compressing unit converts the output information from said memory into coded information containing a character and number or bar code type digital information, and outputs the converted information.

Morohashi teaches a system, wherein said compressing unit converts the output information from said memory into coded information containing a character and number or bar code type digital information (code pattern image encode unit 45), and outputs the converted information. (dot data memory 28) (code pattern image recording apparatus converts input information into a code pattern image....input information is not limited to audio information, but may be video information, digital code data including text data) (col. 5, lines 34-45).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Barrett, Murata and Murano with the teaching of Morohashi to encode the output information to prevent unauthorized access to the maintenance information.

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16. Regarding Claim 6, Barrett et al, Murata, and Murano fail to teach a system, wherein the coded information containing a character and number is expressed by a base-10+n (n is an integer of not less than 1) number.

Morohashi teaches a system, wherein the coded information containing a character and number is expressed by a base-10+n (n is an integer of not less than 1) number (code pattern image recording apparatus converts input information into a code pattern image) (Fig. 3).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Barrett, Murata and Murano with the teaching of Morohashi to encode the output information to prevent unauthorized access to the maintenance information.

17. Regarding Claim 7, Barrett et al, Murata, and Murano et al fail to teach a system, wherein said printing unit of said image forming apparatus prints the coded information output from said compressing unit, and outputs the printed-out sheet, and said service provider's apparatus further comprises: converting means for reading the image information printed on the printed-out sheet, converting the read image into coded information containing a character and number or bar code type digital information, and outputting the converted information; an expanding unit for expanding the compressed character information or the compressed bar code type digital information; and a display unit for displaying the expanded information on a screen or printing out the expanded information.

Murata teaches a system, wherein said printing unit of said image forming apparatus prints the coded information output from said compressing unit (CODEC 57 performs the MMR coding on the binarized image data outputted the SCU 55 so as to generate encoded facsimile image data) (col. 11, lines 17-19), and outputs the printed-out sheet (outputs the resulting converted image data to the printer section 301), and said service provider's apparatus further comprises: converting means for reading the image information printed on the printed-out sheet (image scanner section 300), converting the read image into coded information containing a character and number or bar code type digital information, and outputting the converted information (CODEC 57 performs the MMR coding on the binarized image data outputted the SCU 55 so as to generate encoded facsimile image data) (col. 11, lines 17-19); an expanding unit for expanding the compressed character information or the compressed bar code type digital information (CODEC 57 decodes the encoded facsimile image data so as to generate image data) (col. 11, lines 55-56); and a display unit for displaying the expanded information on a screen or printing out the expanded information (external computer 201).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Barrett, Murata and Murano with the teaching of Morohashi to encode the output information to prevent unauthorized access to the maintenance information.

18. Regarding Claim 8, Barrett et al, Murano et al, and Morohashi fail to teach a system, wherein said image forming apparatus further comprises a first facsimile unit

connected to a communication line to transmit the coded information to said communication line, and said service provider's apparatus further comprises: a second facsimile unit connected to said communication line to receive and output the coded information transmitted from said first facsimile unit; an expanding unit for expanding and outputting the compressed information output from said second facsimile unit; and a display unit for displaying the expanded information on a screen or printing out the expanded information.

Murata teaches a system, wherein said image forming apparatus further comprises a first facsimile unit connected to a communication line to transmit the coded information to said communication line (encoded facsimile image data of one page is transferred to the CCU 59 by the DMAC 54 through a DMA transfer, and then, the encoded facsimile image data is transmitted from the MODEM 70 through the telephone line 64 to a further facsimile apparatus of the other party) (col. 11, lines 22-28), and said service provider's apparatus further comprises: a second facsimile unit connected to said communication line to receive and output the coded information transmitted from said first facsimile unit; an expanding unit for expanding and outputting the compressed information output from said second facsimile unit ; and a display unit for displaying the expanded information on a screen or printing out the expanded information (The CODEC 57 decodes the encoded facsimile image data so as to generate image data. The DMAC 54 transmits line by line the image signal decoded by the CODEC 57 to the PRU 56 through a DMA transfer. The PRU 56 converts image data having a resolution of the decoded image signal into image data having a resolution of the printer section

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301, and outputs the resulting converted image data to the printer section 301 in synchronous with the operation of the printer section 301) (col. 11, lines 50-63).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Barrett, Murata and Murano with the teaching of Morohashi to encode the output information to prevent unauthorized access to the maintenance information.

19. Claim 16 is rejected for the same reason as claim 4.

20. Claim 17 is rejected for the same reason as claim 7.

21. Claim 18 is rejected for the same reason as claim 8.

22. Claims 9-12 and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett et al., Murata, Murano, and Morohasi et al. as applied to claim 4 above, and further in view of Hashimoto et al. (US 6,804,016).

23. Regarding Claim 9, Barrett et al, Murata, Murano and Morohashi et al fail to teach a system, wherein said image forming apparatus further comprises a first server connected to a communication line to transmit the coded information to said communication line, and said service provider's apparatus further comprises: a second server connected to said communication line to receive and output the coded information transmitted from said first server.

Murata teaches an expanding unit for expanding and outputting the compressed information output from said second server; and a display unit for displaying the expanded information on a screen or printing out the expanded information.

Hashimoto et al teach a system, wherein said image forming apparatus further comprises a first server (Fig. 1, S/P Server SP1) connected to a communication line to transmit the coded information to said communication line, and said service provider's apparatus further comprises: a second server connected to said communication line to receive and output the coded information transmitted from said first server ((Fig. 1, S/P Server SP1).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Barrett, Murata, Murano, and Morohashi with the teaching of Hashimoto to encode the output information to prevent unauthorized access to the maintenance information.

24. Regarding Claim 10, Barrett et al, Murata, Murano and Morohashi et al teach a system, wherein said printing unit of said image forming apparatus prints the coded information and outputs a first printed-out sheet, said image forming apparatus further comprises: converting means for reading and converting information on a second printed-out sheet into first character information, and said service provider's apparatus further comprises: converting means for reading and converting image information printed on the first printed-out sheet into compressed second information, and outputting the compressed second information; an expanding unit for expanding the compressed second information; a display unit for displaying the expanded second information on a screen or printing out the expanded second information; and a printing unit for outputting the second printed-out sheet containing information which designates a change of a set value of said image forming apparatus.

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Barrett et al, Murata, Murano, and Morohashi et al fail to teach a system, wherein said image forming apparatus comprise a setting change unit for changing a set value of said image forming apparatus on the basis of the converted first character information.

Hashimoto et al teach a system, wherein said image forming apparatus comprise a setting change unit for changing a set value of said image forming apparatus on the basis of the converted first character information (dividing the raw image into a plurality of data units) (col. 28, lines 37-44).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Barrett, Murata, Murano, and Morohashi with the teaching of Hashimoto to encode the output information to prevent unauthorized access to the maintenance information.

25. Regarding Claim 11, Barrett et al, Murata, Murano and Morohashi et al teach a system, wherein said image forming apparatus further comprises: a first facsimile unit connected to a communication line to transmit the coded first information to said communication line and receive second information transmitted from said communication line, and said service provider's apparatus further comprises: a second facsimile unit connected to said communication line to receive and output the coded first information transmitted from said first facsimile unit, and transmit the second information designating a change of a set value of said image forming apparatus; an expanding unit for expanding and outputting the coded compressed first information output from said

second facsimile unit; and a display unit for displaying the expanded first information on a screen or printing out the expanded first information.

Barrett et al, Murata, Murano and Morohashi et al fail to teach a system, wherein said image forming apparatus further comprises and a setting change unit for changing a set value of said image forming apparatus on the basis of the received second information.

Hashimoto et al teach a system, wherein said image forming apparatus further comprises and a setting change unit for changing a set value of said image forming apparatus on the basis of the received second (dividing the raw image into a plurality of data units) (col. 28, lines 37-44).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Barrett, Murata, Murano, and Morohashi with the teaching of Hashimoto to encode the output information to prevent unauthorized access to the maintenance information.

26. Regarding Claim 12, Barrett et al, Murata, Murano and Morohashi et al teach a system, wherein said image forming apparatus further comprises: a first server connected to a communication line to transmit the coded first information to said communication line, and receive the second information transmitted from said communication line, and said service provider's apparatus further comprises: a second server connected to said communication line to receive and output the coded first information transmitted from said first server, and transmit the second information designating a change of a set value of said image forming apparatus; an expanding unit

for expanding and outputting the coded compressed first information output from said second server; and a display unit for displaying the expanded character information on a screen or printing out the expanded character information.

Barrett et al, Murata, Murano and Morohashi et al teach a system, wherein said image forming apparatus further comprises a setting change unit for changing a set value of said image forming apparatus on the basis of the received second information.

Hashimoto et al teach a system, wherein said image forming apparatus further comprises a setting change unit for changing a set value of said image forming apparatus on the basis of the received second information (dividing the raw image into a plurality of data units) (col. 28, lines 37-44).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Barrett, Murata, Murano, and Morohashi with the teaching of Hashimoto to encode the output information to prevent unauthorized access to the maintenance information.

- 27. Claim 19 is rejected for the same reason as claim 9.
- 28. Claim 20 is rejected for the same reason as claim 10.
- 29. Claim 21 is rejected for the same reason as claim 11.
- 30. Claim 22 is rejected for the same reason as claim 12.

Conclusion

- 31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Conclusion

31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hirokawa (US 5,936,746) discloses a facsimile apparatus for transferring data which is not facsimile image data.

Kanaya (US 6,137,597) discloses a method of controlling a network facsimile apparatus.

Kagawa (US 6,222,645) discloses a facsimile apparatus and a communication method.

Ushida (US 6,577,768) discloses a coding method, code converting apparatus and image forming apparatus.

Nakamura (US 6,825,954) discloses an information communication apparatus.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satwant K. Singh whose telephone number is (703) 306-3430. The examiner can normally be reached on Monday thru Friday 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A. Williams can be reached on (703) 305-4863. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Satwant Singh

sks

Satwant K. Singh
Examiner
Art Unit 2626

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**KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER**